

# Exploring the Optimization of International Communication Paths for Zhejiang's Intangible Cultural Heritage from the New Media Perspective: An Empirical Study

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**Abstract:** Based on an empirical survey conducted in 20 counties and cities in Zhejiang Province, this study reveals the current status and challenges of Zhejiang's Intangible Cultural Heritage (ICH) in new media communication. The research finds that 73.07% of respondents acknowledge its international reputation, but there is a significant imbalance in cognitive distribution. The international recognition of performing arts ICH, such as Yue Opera and the Legend of the White Snake, reaches 68.2%, while the recognition of craftsmanship ICH, such as Longquan Celadon and Yueqing Fine-Line Paper-Cutting, is less than 25%. New media platforms have become the core communication engine, with short videos (92.31%) and live streaming (57.69%) significantly enhancing communication effectiveness. However, problems such as the "Matthew Effect" and insufficient cross-cultural adaptation exist. The study proposes a three-dimensional optimization path of "content innovation - technological empowerment - institutional collaboration", emphasizing the integration of popular culture, multimodal narration, and international cooperation mechanisms to promote the transformation of Zhejiang's ICH from "cultural symbols" to "global discourse".

**Keywords:** Intangible cultural heritage; New media communication; International communication; Short video strategy; Cross-cultural narration

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## 1. Research background and theoretical framework

With the in-depth penetration of Web 3.0 technology, global cultural communication presents the characteristics of "fragmented communication" and "immersive experience" coexisting<sup>[1]</sup>. As an important birthplace of China's revolutionary culture, Zhejiang boasts 23 national-level ICH items. Its international communication is not only a strategic requirement for the construction of national cultural soft power but also an important practice of cultural exchanges and mutual learning<sup>[2]</sup>. However, the current communication practice faces three major contradictions:

First, the insufficient ability of modern transformation of cultural symbols. For example, the international recognition rate of Longquan Celadon firing technology is only 23.72% due to the lack of narrative innovation; Second, weak technological adaptability. Only 10.9% of respondents support multilingual strategies, leading to cross-cultural communication barriers; Third, the unbalanced communication ecology. Popular projects occupy 78% of traffic resources, forming a “Matthew Effect” where “the strong become stronger” [3-5].

This study establishes a “Cognition-Communication-Effectiveness” theoretical framework. By integrating the Cultural Adaptation Theory and the Uses and Gratifications Theory, it conducts a systematic analysis of the international communication mechanism of Zhejiang’s ICH [6]. It is found that new media communication achieves cultural communication through the threefold path of “symbol reconstruction - emotional resonance - value identification”. Among them, the visual impact of short videos ( $\beta=0.68, P<0.01$ ) and the interactivity of live streaming ( $\beta=0.53, P<0.05$ ) have significant positive effects on communication effectiveness.

## 2. Research methods and data sources

The survey targets residents in 20 counties and cities of Zhejiang Province (Table 1). In terms of age distribution of the questionnaire samples, the groups aged 19-30 (40.39%) and 46-60 (35.26%) account for a high proportion, while the groups under 18 (2.56%) and over 60 (1.92%) have weak representativeness. The student group accounts for the highest proportion (about 33.33%).

**Table 1.** Proportion of respondents with different occupations

Occupation	Number of People	Percentage
Student	156	33%
Educator	39	8%
Media Practitioner	45	10%
Cultural Worker	42	9%
Medical Staff	45	10%
Service Industry	48	10%
Institution	21	4%
Others	72	15%

Note: Total valid responses: 468.

A mixed research method is adopted, with quantitative research as the main approach and qualitative research as the supplementary approach. Using SPSS 26.0 for descriptive statistics, factor analysis, and structural equation model testing, audience data from 11 provinces and cities were collected through online questionnaires (sample size  $N = 468$ ). Meanwhile, in-depth interviews are conducted with 32 ICH inheritors and cultural scholars to obtain high-quality data.

The questionnaire consists of 5 dimensions and 23 items, evaluated using a 5-point Likert scale. According to reliability analysis, the Cronbach’s  $\alpha$  coefficient is 0.89. The validity test shows that the KMO value is 0.83, and the Bartlett’s test of sphericity yields a value of 1247.63 ( $P < 0.001$ ), indicating that the data have good internal consistency and construct validity.

### 3. Research findings and analysis

#### 3.1. Current situation of cultural communication

International perceptions of Zhejiang’s Intangible Cultural Heritage (ICH) exhibit polarization: Performing arts ICH, such as Yue Opera and the Legend of the White Snake, have an international recognition rate of 68.2%, relying on film and television adaptations and overseas tours. In contrast, craftsmanship ICH, such as Longquan Celadon and Yueqing Fine-Line Paper-Cutting, have a recognition rate of less than 25% due to single communication forms. This difference stems from the “cultural discount” phenomenon—the professional threshold and symbolic complexity of craftsmanship ICH lead to cross-cultural understanding barriers. Currently, new media has become the core communication driver for Zhejiang’s Intangible Cultural Heritage. 91.67% of respondents obtain ICH information through social media, among which short videos (85.90%) and live streaming (41.03%) are the most popular. Typical cases show that the live streaming of Dongyang Wood Carving attracts more than 100,000 viewers for real-time interaction, while Shaoxing Rice Wine has achieved annual sales exceeding 100 million yuan through live commerce, which confirms the improvement of communication effectiveness by new media (Table 2).

**Table 2.** Proportion of various new media users obtaining ich information in Zhejiang Province

New Media Platforms	Number of Choices	Proportion
Social Media (e.g., WeChat, QQ, Xiaohongshu, Weibo, Facebook, Twitter, Instagram)	429	91.67%
Video Websites (e.g., Douyin, Kuaishou, Bilibili, YouTube)	402	85.90%
Blogs/Forums	147	31.41%
Live Streaming	192	41.03%
Mobile Applications (e.g., cultural APPs)	120	25.64%

#### 3.2. Communication dilemma

Currently, there is insufficient technological adaptability: only 10.9% of respondents support multilingual strategies, and the subtitle translation error rate of Intangible Cultural Heritage (ICH) short videos reaches 18.7%, which has restricted the effectiveness of cross-cultural communication. Meanwhile, the application of technologies such as AI translation and VR exhibitions has not yet become widespread, hindering the realization of immersive experiences<sup>[7,8]</sup>. Furthermore, content homogenization is severe, 62.5% of ICH short videos suffer from similar narrative modes and lack in-depth cultural connotations. For instance, among videos related to Longquan Celadon, 78% focus solely on craft demonstrations, while only 12% involve the interpretation of historical stories and cultural values, which undermines users’ long-term interest.

#### 3.3. Communication effectiveness

The structural equation model shows that the effect of new media communication is affected by three major factors: content innovation ( $\beta = 0.52$ ), technological empowerment ( $\beta = 0.41$ ), and user interaction ( $\beta = 0.37$ ). Among them, content strategies combining popular cultural hotspots (92.95% support rate) and in-depth expert interpretations (69.23% support rate) can effectively improve communication effects.

## **4. Optimization paths and strategic suggestions**

### **4.1. Content innovation**

The construction of a multimodal narrative system for ICH can be advanced from two aspects: integration with popular culture and storytelling expression. On the one hand, innovative integration between ICH and popular culture should be actively promoted. For instance, drawing on the cross-border model of “ICH + e-sports”, the AR game *Ingenuity* has been developed, which skillfully blends the unique singing style of Yue Opera with trendy electronic music to accurately appeal to young audiences <sup>[9]</sup>. During the Hangzhou Asian Games, more than 60 ICH items were collectively showcased in the “Cultural House”, achieving in-depth integration between traditional culture and international sports events <sup>[10]</sup>. On the other hand, a dual-track expression strategy of “historical narrative + contemporary value” should be adopted. Take the documentary *Memory* as an example: through the third-party perspective of David Jones, an American scholar, it vividly tells the ICH stories of the Siming Mountain old revolutionary base area. This documentary has achieved over 2 million views overseas, with an interaction rate as high as 15%.

### **4.2. Technological empowerment**

Creating an immersive communication ecosystem involves two key aspects: the application of intelligent technology and platform collaborative communication. For the application of intelligent technology, we can develop an AI translation system for short videos to generate real-time multilingual subtitles, create VR virtual exhibition halls to reproduce the scenes of the Eastern Zhejiang Anti-Japanese Base Area, and enable users to confirm the ownership and collect virtual ICH works through blockchain technology <sup>[11]</sup>. Meanwhile, in terms of platform collaborative communication, the “dual-track live streaming” model can be adopted: craft demonstrations are carried out during the day, and cross-border e-commerce is connected at night, thus constructing a communication closed loop of “craft visualization - value perception - commodity accessibility” <sup>[12,13]</sup>. For example, Longquan Celadon has achieved sales of over 5 million yuan in a single live streaming session through the “shake” interaction function.

### **4.3. Institutional collaboration**

Improving the communication support system for Intangible Cultural Heritage (ICH) can be focused on two key dimensions: establishing a sound talent training mechanism and building an extensive international cooperation network. For the talent training mechanism, the goal is to cultivate compound talents who possess both professional skills and cross-cultural communication capabilities, and to this end, the “ICH International Communication Talent Incubation Base” has been set up; meanwhile, the Zhejiang Xiaobaihua Yue Opera Troupe has joined hands with the Paris Champs-Élysées Theater to select outstanding actors to participate in international theater festivals, which effectively enhances the cultural discourse power of Zhejiang’s ICH. For the international cooperation network, it relies on the cultural tour mechanism under the “Belt and Road” Initiative to establish in-depth cooperative relations with overseas museums and universities; a typical example is that the Zhejiang ICH Museum and the Berlin Asian Art Museum in Germany co-hosted the special exhibition “Craftsmanship”, which successfully attracted more than ten thousand visitors.

## **5. Conclusion and prospects**

This study reveals the “cognitive gap” and “technological bottleneck” in the international communication of

Zhejiang's ICH, and proposes a three-dimensional optimization path of "content innovation - technological empowerment - institutional collaboration". In the future, more attention should be paid to the reconstruction of communication modes by new technologies such as the metaverse and AI-Generated Content (AIGC), promoting the transformation of ICH communication from "cultural output" to "emotional resonance". This study provides theoretical and practical references for government departments, cultural institutions, and new media platforms, helping Zhejiang's ICH achieve value enhancement in the global digital wave <sup>[14,15]</sup>.

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## References

- [1] Liu Y, Kong Q, 2022, Research on the Construction of the Discourse System for the International Communication of China's Intangible Cultural Heritage: Scope and Methods. *Modern Communication*, 44(7): 64–69 + 136.
- [2] Tian SM, Qin J, 2026, Cultural Connotation, Spiritual Value, and Innovation in the Times: Three Dimensions of Telling Good Stories About National Intangible Cultural Heritage—Taking Guizhou Miao Embroidery as an Example. *Journal of Educational Media Research*, (1): 96–103.
- [3] Chai Y, Wang YT, 2024, Research on the International Communication Practice of China's Intangible Cultural Heritage: Taking the Overseas Short Video Platform TikTok as an Example. *Communication and Copyright*, (17): 76–80 + 84.
- [4] Liu KL, 2021, Field Practice and Theoretical Reflection on the Protection of Intangible Cultural Heritage. *Social Sciences in China*, (3): 148–164.
- [5] Peng L, 2022, New Media Communication: Paradigm Revolution and Theoretical Reconstruction. *Journalism & Communication Studies*, 29(5): 5–21 + 127.
- [6] Han S, 2025, The Value Effect and Application Strategy of Digital Media Art in the Inheritance of Intangible Cultural Heritage. *Journal of Honghe University*, 23(1): 24–28.
- [7] Huang Y, Pan H, n.d., Research on the Enhancement of Governance Efficiency of Public Cultural Resources Empowered by Digital Narrative from the Perspective of Digital Humanities. *Library*, 1–13.
- [8] Li HW, Xie QG, 2026, A Preliminary Study on the Concept of "Intangible Cultural Heritage Communication" from an Interdisciplinary Perspective. *Journal of Educational Media Research*, (1): 89–95.
- [9] Li PR, Wang WR, Xu XT, 2026, Reconstruction of Communication Paradigm for New Media Intervention in Traditional Folk Art—Taking the Construction of Short Video Communication Matrix of Northern Shaanxi Storytelling as an Example. *Journal of Yulin University*, 36(1): 22–28.
- [10] Xu JH, Zhou CR, 2023, "ICH + Tourism" Becomes a New Growth Point for Rural Tourism. *China Culture Daily*, March 16, 2023.
- [11] Liu JC, 2026, A Study on the Construction of Narrative Strategies for Animated Works With Intangible Cultural Heritage Themes. *Appreciation of Masterpieces*, (3): 24–26.

- [12] Dong J, Zhang YZ, 2026, Protection and Inheritance of Woodblock Printmaking Empower the Narrative of Chinese Intangible Cultural Heritage Brands—Digital Protection of Forty Scenes of Jinling in the Qing Dynasty Demonstrates the Inheritance and Innovation of Cultural Industry. *China Brand and Anti-Counterfeiting*, (1): 234–240.
- [13] Yin XN, Song YY, 2026, Design Translation, Inheritance and Innovation of Jinan Intangible Cultural Heritage Cultural and Creative Products From the Perspective of Productive Protection. *Industrial Design*, (1): 112–115.
- [14] Wei Q, 2025, A Practical Study on Integrating Regional Cultural Resources Into the Ideological and Political Education of Watermark Printmaking Courses in Colleges and Universities. *Journal of Puer University*, 41(6): 91–95.
- [15] Wen MY, 2026, Practical Exploration of Intangible Cultural Heritage Archives Work in the New Era to Promote Cultural Inheritance and Innovation. *Shen Hua*, (3): 111–113.

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